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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/086,582	02/27/2002	Jack Knight III	011003	9024

7590 05/05/2004

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EXAMINER
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ABDULSELAM, ABBAS I

ART UNIT	PAPER NUMBER
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2674

DATE MAILED: 05/05/2004

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Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/086,582

Applicant(s)

JACK KNIGHT III ET AL.

Examiner

Abbas I Abdulsalam

Art Unit

2674

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. §§ 119 and 120**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_.
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2. 6) ☐ Other: .

**DETAILED ACTION*****Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-19 rejected under 35 U.S.C. 103(a) as being unpatentable over Bishop et al. (USPN 5923319) in view of Faris et al. (USPN 6414728).

Regarding claim 1, Bishop teaches a unitary lens filter (Fig. 4 and col. 4, lines 38-47, and col. 5, lines 12-15) for a responsive display device with associated process control equipment having an internal screen adapted to display (col. 6, lines 45-48) process information to facilitate operator control of the process and a sensor (col. 5, lines 59-60) adapted to receive operator control input (col. 5, lines 58-61 and col. 6, lines 1-3), said lens filter (col. 1, lines 10-15 and col. 3, lines 20-25) comprising: a front cover (Fig. 1 and (col. 4, lines 1-3 and Fig. 1 (11, 15, 13)) anchoring said lens filter to the process control equipment (Fig. 1), said front cover defining a central port (Fig. 1 (13) through which said display device may be observed (Fig. 3b and col. 3, lines 50-51) by the operator; a bezel integral with said rear lens for securing said rear lens to said front cover (col. 5, lines 38-40, col. 6, lines 32-36 and Fig. 3 (15) ), said bezel having a periphery extending substantially beyond the periphery of said rear lens and wherein said bezel is formed simultaneously with the formation of said rear lens (col. 5, lines 35-41, 55-56 and

col. 6, lines 12-15), and both are formed by molding or forming to form a shield impenetrable by high pressure liquids to thereby protect said display device (col. 4, lines 20-37); and, an integral reinforcing lens permitting said sensor to receive operator input there through and securing said rear lens periphery to said bezel to stabilize said lens (col. 6, lines 1-3 and Fig. 3(A-B) and thereby substantially dissipate any external force including repetitive operator contact to prevent interruption of operator input when the force is inadvertently applied to said rear lens (col. 6, lines 4-11).

Bishop does not teach “a substantially transparent rear lens filter housed in said central port said rear lens filter permitting an operator to view process control information shown on said display device”.

Faris et al. (hereinafter = “Faris”) on the other hand teaches a computer system (1) that is operated in its Illuminated Direct Viewing Mode of operation, the performance of which includes moving rear panel (21) and reflective surface (40) against Fresnel lens panel (38) of display panel assembly (10), and then electronically reconfiguring display panel assembly (10) into its direct viewing state of operation. See col. 20, lines 63-67 and col. 21, lines 1-6. Furthermore, Faris teaches that the display panel (10) is constructed with polarization filter (77). See col. 22, lines 13-16.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Bishop’s display device to adapt Faris’s Illuminated Direct Viewing Mode. One would have been motivated in view of the suggestion in Faris that the Illuminated Direct Viewing Mode which includes the use of polarization filter (77) is functionally equivalent to “substantially transparent rear lens

filter". The use of Illuminated Direct Viewing Mode helps function a display mechanism with direct projection as taught by Faris.

Regarding claim 2, Bishop teaches the integral bezel includes a peripheral edge surrounding and captivating the sensor and dissipating forces transferred thereto by the bezel (col. 5, lines 55-56 and col. 6, lines 1-3).

Regarding claim 3, Bishop teaches an internal lens retainer adapted to captivate said bezel compressibly against said front cover to secure said lens (col. 6, lines 12-19).

Regarding claim 4, Bishop teaches the said sensor comprises an infrared touch input device having opposing banks of emitters and receivers (col. 6, lines 39-45).

Regarding claim 5, Bishop teaches said sensor comprises an acoustic input device having opposing banks of emitters and receivers (col. 6, lines 39-45).

Regarding claim 6, Bishop teaches the said sensor comprises an optical input device having opposing banks of emitters and receivers (col. 6, lines 39-45).

Regarding claim 7, Bishop teaches the said display comprises a liquid crystal display device or a cathode ray tube display device (col. 5, lines 58-62).

Regarding claim 8, Bishop teaches integral display lens filter (Fig. 4 and col. 4, lines 38-47, and col. 5, lines 12-15) for an associated process machine adapted to display process (col. 6, lines 45-48) information reviewable by an operator (col. 5, lines 43-44), said lens (col. 1, lines 10-15 and col. 3, lines 20-25) comprising: a front cover (col. 4, lines 1-3 and Fig. 1 (11, 15, 13)) captivating a bezel against an internal lens retainer for securing an integral (col. 6, lines 32-36), wherein said bezel forms a mechanical lock to the machine that provides a liquid tight seal (col. 5, lines 39-40, 55-60 and Fig. 3 (15)); an integral reinforcing edge formed about the periphery of the bezel for diffusing a touch force wherein the touch force is applied to said lens or said rear lens filter (col. 6, lines 1-11); wherein said reinforcing edge, said bezel, said lens and said internal lens retainer form a housing adapted (col. 6, lines 12-19) to protectively captivate a plurality of opposing emitters and receivers disposed around the periphery of said lens, said emitter and receivers forming a grid (Fig. Fig. 5 (803)) over said rear lens (col. 6, lines 20-28) a display disposed behind and adjacent to said lens and adapted to display process information behind said grid (col. 6, lines 28-30) and a controller adapted to interpret interruptions in said grid and providing input coordinates for said interruption (col. 6, lines 26-28; wherein said front cover is secured to the machine to captivate said lens against the machine to protect said display (col. 6, lines 33-39).

Bishop does not teach “substantially transparent rear lens filter and lens to the machine in an operative configuration to display process information through said lens filter and receive operator input through said lens, so said lens filter and said lens are held in place relative to the machine”.

Faris on the other hand teaches a portable computer system (1) that is operated in its Illuminated Direct Viewing Mode of operation the performance of which includes moving rear panel (21) and reflective surface (40) against Fresnel lens panel (38) of display panel assembly (10), and then electronically reconfiguring display panel assembly (10) into its direct viewing state of operation. See col. 20, lines 63-67 and col. 21, lines 1-6. Furthermore, Farris teaches that the display panel (10) is constructed with polarization filter (77). See col. 22, lines 13-16.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Bishop's display device to adapt Faris's Illuminated Direct Viewing Mode. One would have been motivated in view of the suggestion in Faris that the Illuminated Direct Viewing Mode which includes the use of polarization filter (77) is functionally equivalent to "substantially transparent rear lens filter". The use of Illuminated Direct Viewing Mode helps function a display mechanism with direct projection as taught by Faris.

Regarding claim 9, Bishop teaches said bezel may be compressibly secured between said cover and said internal retainer to compensate for different rates of expansion and contraction (col. 4, lines 60-63) of said cover and said rear lens while maintaining the mechanical lock and liquid seat and wherein said bezel is a unitary member with said lens and said rear lens filter bezel (col. 5, lines 55-56 and col. 6, lines 1-3).

Regarding claim 10, Bishop teaches said emitters and receivers comprise infrared emitters and receivers (col. 6, lines 39-4).

Regarding claim 11, Bishop teaches said emitters and receivers 6 comprise acoustic emitters and receivers (col. 6, lines 39-45).

Regarding claim 12, Bishop teaches said emitters and receivers comprise optical emitters and receivers (col. 6, lines 39-45).

Regarding claim 13, Bishop teaches said display comprises a liquid crystal display device or a cathode ray tube display device (col. 5, lines 58-62).

Regarding claim 14, Bishop teaches a computer system display adapted to show process information and receive operator input, said system comprising (LCD, abstract): a system unit in a substantially rigid housing (Fig. 4) with a central access port (Fig. 1 (13)) said system unit comprising an internal display means (col. 6, lines 45-48) for displaying process information in said access port and sensor means for receiving operator input (col. 6, lines 1-3) adjacent said display means (col. 5, lines 55-63); and, an exterior lens assembly covering said access port and having a bezel Fig. 3 with inner edges describing a lens circumscribing said access port (Fig. 1 (11, 15, 13), col. 4, lines 1-3), said bezel made of a polycarbonate material (col. 4, lines 6-8), wherein said lens assembly is adapted to completely prevent liquid entry through said access port (col. 4,



lines 20-37), said lens assembly captivated to said housing to provide a liquid tight- seal to protect said touch sensor (col. 2, lines 43-65).

Bishop does not teach, “an inwardly placed rear lens filter that covers said access port yet permits the displaying of process information there through”.

Faris on the other hand teaches a portable computer system (1) that is operated in its Illuminated Direct Viewing Mode of operation, the performance of which includes moving rear panel (21) and reflective surface (40) against Fresnel lens panel (38) of display panel assembly (10), and then electronically reconfiguring display panel assembly (10) into its direct viewing state of operation. See col. 20, lines 63-67 and col. 21, lines 1-6. Furthermore, Farris teaches that the display panel (10) is constructed with polarization filter (77). See col. 22, lines 13-16.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Bishop’s display device to adapt Faris’s Illuminated Direct Viewing Mode. One would have been motivated in view of the suggestion in Faris that the Illuminated Direct Viewing Mode which includes the use of polarization filter (77) is functionally equivalent to “inwardly placed rear lens filter”. The use of Illuminated Direct Viewing Mode helps function a display mechanism with direct projection as taught by Faris.

Regarding claim 15, Bishop teaches a front cover captivating said bezel against an internal lens retainer for securing said lens assembly to said housing in an operative configuration to display process information through said lens filter and receive operator input through said lens, so said lens filter and said lens are held in place relative to said

housing and wherein said bezel provides a liquid tight seal. (col. 5, lines 55-56 and col. 6, lines 1-3).

Regarding claim 16, Bishop teaches said sensor means comprises an 2 infrared touch input device having opposing banks of emitters and receivers (col. 6, lines 39-45).

Regarding claim 17, Bishop teaches said sensor means comprises an acoustic input device having opposing banks of emitters and receivers (col. 6, lines 39-45).

Regarding claim 18, Bishop teaches said sensor means comprises an optical input device having opposing banks of emitters and receivers (col. 6, lines 39-45).

Regarding claim 19, Bishop teaches said display means comprises a liquid crystal display device or a cathode ray tube display device (col. 5, lines 58-62).

### ***Conclusion***

2. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following arts are cited for further references.

U.S. Pat. No. 5,986,737 to Evanicky et al.

U.S. Pat. No. 6,690,443 to Poliakine

Art Unit: 2674

3. Any inquiry concerning this communication or earlier communication from the examiner should be directed to **Abbas Abdulsalam** whose telephone number is **(703) 305-8591**. The examiner can normally be reached on Monday through Friday (9:00-5:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Richard Hjerpe**, can be reached at **(703) 305-4709**.

**Any response to this action should be mailed to:**

Commissioner of patents and Trademarks

Washington, D.C. 20231

**or faxed to:**

**(703) 872-9314**

Hand delivered responses should be brought to Crystal Park II, Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).


Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology center 2600 customer Service office whose telephone number is (703) 306-0377.

Abbas Abdulsalam

Examiner

Art Unit 2674

April 30, 2004

  
**XIAO WU**  
**PRIMARY EXAMINER**